

WHAT IS CLAIMED IS:

Sub C1 1. A silicon focus ring consisting of silicon single crystal used as a focus ring in a plasma apparatus, wherein concentration of interstitial oxygen contained in the silicon focus ring is not less than 5×10^{17} atoms/cm³ and not more than 1.5×10^{18} atoms/cm³.

2. The silicon focus ring according to Claim 1, wherein nitrogen concentration in the silicon focus ring is not less than 5×10^{13} number/cm³ and not more than 5×10^{15} number/cm³.

Sub D1 3. The silicon focus ring according to Claim 1, wherein the surface of the silicon focus ring is subjected to etching treatment.

4. The silicon focus ring according to Claim 2, wherein the surface of the silicon focus ring is subjected to etching treatment.

Sub C2 5. A producing method for a silicon focus ring used for a plasma apparatus, wherein a single crystal silicon wherein concentration of interstitial oxygen contained in the silicon focus ring is not less than 5×10^{17} atoms/cm³ and not more than 1.5×10^{18} atoms/cm³ is grown by a Czochralski method, the single crystal silicon is processed in a circle, and a silicon focus ring is produced.

6. The producing method for a silicon focus ring used as a focus ring in a plasma apparatus according to Claim 5, wherein a single crystal silicon is grown by a Czochralski method with doping nitrogen, so that nitrogen concentration of the silicon is not less than 5×10^{13} number/cm³ and not more than 5×10^{15} number/cm³.

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